

## REMARKS

Reconsideration is respectfully solicited.

The undersigned expresses her appreciation to Mr. Vanoy for the courteous and thorough interview of September 18.

The claims have been amended. These claims amendments of Claims 1 and 6 were approved by the Examiner during the interview. The amendment of claim 6 above was presented in the prior amendment in the MARKED UP VERSION Section; however, there was an error in transcription to page 2 of that prior paper.

The amendment of Claim 11 presented during the interview did not meet with the Examiner's satisfaction. Presentation of Claim 12 is to state the import of Claim 11 in a different way and is directly responsive to the Examiner's criticisms of the word "substantially." Moreover, it is supported by PTO policy as expressed in the MPEP, Section 2111.03. In reviewing the MPEP, we note that the phrase "consisting essentially of" is construed to limits the scope of a claim to the specified materials and "those materials that do not materially affect the basic and novel characteristic(s)" of the claimed invention . In re Herz [citation omitted].

Accordingly, applicants' claims are to be construed not to cover amounts of silica which result in caking of the composition recited in the claims at issue. As noted by the Examiner, and as described in the Examples of the specification, caking tendency of the subject compositions is reduced with reduction in silica.

Applicants respectfully traverse the rejections of the claims under 35 U.S.C. 103(a) over German Patent No. DE 4100645 (Regler) which discloses a composition for the purification of gas . The title of this reference is "*Waste gas purificn. With nitrogen*

*basic cpds. Removing acid cpds. – by adding ammonia and alkali and/or alkaline earth cpds., for foundry, alkali chloride electrolysis, blast furnace, power station, refuse and glass industry.”* In general the composition comprises:

- A basic alkaline and /or alkaline earth substance;
- A basic compound comprising nitrogen for absorption of NO<sub>x</sub>;
- An additive with large specific area, including explicitly silica to absorb certain impurities and improving the reactivity with the gas.

More specifically, the Abstract of the reference recites

“Nitrogen bases (IA) are injected above the dw pt. Of H<sub>2</sub> in addn. to basic alkali and/or alkaline earth cpds. (IB), mixed with the gas stream and reacted and the solids are sepd. In dust separators. Zeolites are used as surfactant (II) together with (IB). Pref. (IA) is NH<sub>3</sub>, ammonium salts, e.g. NH<sub>4</sub>Cl, urea and/or prim., sec. and/or tert. Amines, (NH<sub>3</sub> gas) (B) is NaOH, KOH, NaHCO<sub>3</sub>, Na<sub>2</sub>CO<sub>3</sub>, KHCO<sub>3</sub>, K<sub>2</sub>CO<sub>3</sub>, quicklime, Ca(OH)<sub>2</sub>, limestone, MgO, Mg(OH)<sub>2</sub> and/or MgCO<sub>3</sub>, as solid, soln. or suspension. (IB) may be mixed with (II) content of the (IB)/(II) mixt. Is 0.1-95,(0.5-50) esp. 1-10%.”

Applicant's composition is a non obvious selection among Regler's composition.


The selection is not obvious for the following reasons:

1. Applicant' invention is intended to solve an agglutination problem (the composition is a caking inhibitor-see claim 1-). **Regler does not mention nor suggest an agglutination problem.** As a consequence, after reading the DE 4100645 document, a person skilled in the art would not make, among Regler's numerous compositions, the very particular selection which solves a problem not even mentioned in the document;

2. In order to reconstitute applicant's invention from DE 4100645 document, a person skilled in the art must operate successive selections
3. Regler's composition can contain silica (silica is explicitly mentioned among the possible compositions), whereas the applicant has discovered the negative effect of silica for the agglutination problem. Specifically, applicant's claims recite that the composition is substantially devoid of silica.

Withdrawal of the rejection under 35 U.S.C. 103(a) is respectfully solicited.

Respectfully submitted,



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## APPENDIX

### MARKED UP VERSION OF AMENDMENTS IN THE SPECIFICATION

1. (Thrice Amended) Solid pulverulent reactive composition for the purification of a gas, comprising sodium bicarbonate and a caking inhibitor for sodium bicarbonate and being [substantially] devoid of silica, said inhibitor comprising lignite coke and/or a magnesium compound selected from the group consisting of magnesium oxide, magnesium hydroxide, mixtures of magnesium oxide and magnesium hydroxide and magnesium hydroxycarbonate.

6. (Twice Amended) A process for the purification of a gas, comprising introducing a reactive composition [in accordance with] of Claim 1 into the gas and subjecting the gas to removal of dust.

The amendment of claim 6 above was presented in the prior amendment in the MARKED UP VERSION Section; however, there was an error in transcription to page 2 of that prior paper.

Please cancel Claim 11 and add new Claim 12:

-- 12. A non-caking solid pulverulent reactive composition for the purification of a gas containing HCl, HF, sulfur oxide, nitrogen oxide, dioxins, furans, and admixtures thereof, consisting essentially of

sodium bicarbonate and

a caking inhibitor for sodium bicarbonate,

said inhibitor is selected from the group consisting of lignite coke, a magnesium compound and admixtures thereof, wherein said magnesium compound is selected from

the group consisting of magnesium oxide, magnesium hydroxide, mixtures of magnesium oxide and magnesium hydroxide and magnesium hydroxycarbonate;

wherein said composition is devoid of silica which interferes with said purification.--